

## CLAIMS

What is claimed is:

1. An exhaust valve assembly comprising:  
a valve plate movable within an exhaust pipe between an open and closed position; and  
an electric actuator for moving said valve plate.
2. The assembly as recited in claim 1, comprising a valve neck for supporting said electric actuator a distance from said exhaust pipe.
3. The assembly as recited in claim 2, comprising a support housing mounted to said valve neck for supporting said electric actuator.
4. The assembly as recited in claim 3, wherein said support housing includes a plate disposed between said electric actuator and said exhaust pipe for shielding said actuator from heat.
5. The assembly as recited in claim 3, wherein said valve neck comprises a tubular cross section.

6. The assembly as recited in claim 3, wherein said valve neck comprises a cross-section smaller in a direction transverse to said exhaust pipe than a cross section of said support housing transverse to said exhaust pipe.
7. The assembly as recited in claim 1, wherein said electric actuator comprises a linearly movable element.
8. The assembly as recited in claim 1, wherein said electric actuator comprises a rotatably movable element.
9. The assembly as recited in claim 1, comprising an actuation tube having a tubular cross section rotatable by said electric actuator for moving said valve plate.

10. An exhaust valve assembly comprising:  
  
a valve plate movable within an exhaust pipe between an open and closed position; and  
  
an electric actuator for moving said valve plate; and  
  
a valve neck supporting said electric actuator a distance from said exhaust pipe.
11. The assembly as recited in claim 10, comprising a support housing supported by said valve neck, said support housing comprising a plate disposed between said electric actuator and said exhaust pipe for shielding said actuator from heat.
12. The assembly as recited in claim 11, wherein said valve neck comprises a cross-section smaller in a direction transverse to said exhaust pipe than a cross section of said support housing.
13. The assembly as recited in claim 10, comprising an actuation tube having a tubular cross section rotatable by said electric actuator for moving said valve plate.

14. An exhaust system for a motor vehicle comprising:  
an exhaust pipe directing exhaust gases; and  
an exhaust valve assembly for increasing a back pressure within said exhaust pipe for reflecting sound waves, said exhaust valve assembly comprising a valve plate movable about an axis of rotation for blocking a portion of exhaust gases flowing through said exhaust pipe, and an electric actuator for moving said valve.
15. The system as recited in claim 14, comprising a valve neck for supporting and spacing said actuator a distance from said exhaust pipe.
16. The system as recited in claim 15, comprising a support housing supported by said valve neck, wherein said valve neck comprises a cross-section transverse to said exhaust pipe smaller than a cross-section of said support housing in a direction transverse to said exhaust pipe.
17. The system as recited in claim 16, wherein said support housing comprises a plate disposed between said actuator and said exhaust pipe for shielding said actuator from heat emitted from said exhaust pipe.
18. The system as recited in claim 14, comprising an actuation tube having a tubular cross section rotatable by said electric actuator for moving said valve plate.

19. The system as recited in claim 14, wherein said valve plate creates a tuning effect replicating an exhaust pipe of a diameter smaller than said exhaust pipe.
20. The system as recited in claim 14, comprising an actuation tube having a solid shaft.
21. The system as recited in claim 14, comprising an actuation tube having a hollow shaft.
22. The system as recited in claim 14, comprising an actuation tube having a solid portion and a hollow portion.